

CLAIMS

1. A system for managing reference numerals comprising:
 - an element database for receiving and storing a plurality of element names;
 - a reference database for receiving and storing a plurality reference numerals, wherein selective reference numerals in the reference database correspond to selective element names in the element database; and
 - a manager system in communication with the element database, the reference database, and at least one document file, the manager system providing for user designated insertion of element names and reference numerals into the document file, wherein changes to an element name in the element database or changes to a reference numeral in the reference database, correspondingly change the element name or reference numeral in the document file.
2. The system, as recited in claim 1, wherein the manager system is one of a window, pull down menu, and toolbar accessible at least through a word processing program.
3. The system, as recited in claim 1, further comprising a numbering system for automatically creating reference numerals within the reference database, wherein the reference numerals are created based, at least, upon user selected parameters of starting value and interval value.
4. The system, as recited in claim 1, wherein the reference numerals are re-defineable in the numeral database based upon the sequential placement of the reference numeral in the document file.

1 5. The system, as recited in claim 4, wherein the reference numerals are re-
2 defineable in the numeral database such that the reference numerals are in assenting order
3 within the document file.

4 6. The system, as recited in claim 1, wherein the manager system is operatively
5 related to at least one hotkey operable within a document file operating program, wherein
6 an element name and a corresponding reference numeral may be inserted into the
7 document file upon operation of the hotkey.

8 7. The system, as recited in claim 6, wherein operation of the hotkey in
9 association with inputting a selective reference numeral inserts the element name that
10 corresponds to the selective reference numeral.

11 8. The system, as recited in claim 6, wherein operation of the hotkey in
12 association with inputting portions the selective element name inserts the selective
13 element name and the corresponding reference numeral.

14 9. The system, as recited in claim 6, wherein the hotkey allows for selective
15 insertion of a singular or plural of an element name.

16 10. The system, as recited in claim 6, wherein the hotkey allows for selective
17 insertion of a capitalized or lowercase form of an element name.

18 11. The system, as recited in claim 1, wherein the element name and the reference
19 numeral are maintained within a field within the document file.

20 12. The system, as recited in claim 1, wherein the system manager allows element
21 names to be inserted into document file wherein the corresponding reference numeral are
22 omitted.

23 13. The system, as recited in claim 1, where in the element database includes a list
24 of plurals for the corresponding element names.

1 14. The system, as recited in claim 1, wherein the element names and reference
2 numerals are insertable into a drawing file, wherein changes to an element name in the
3 element database or changes to a reference numeral in the reference database,
4 correspondingly change the element name or reference numeral in the drawing file.

5 15. The system, as recited in claim 14, wherein the element names are selectively
6 removable from the drawing file by the manager system.

7 16. The system, as recited in claim 14, further comprising a system for associating
8 messages with the reference numerals and element names within the drawing file for
9 providing instructions relating to placement of the reference numerals and element names
10 within the drawing file.

11 17. The system, as recited in claim 1, wherein the element database and the
12 reference database are part of a library of element databases and reference databases.

13 18. The system, as recited in claim 1, further comprising a means for inserting at
14 least one of the element names and reference numerals into the document file.

1 19. A method in a computer system for managing reference numerals, the method
2 comprising:
3 inserting fields into a text file, wherein the fields are made of element names from
4 an element database and reference numerals from a reference database, wherein selective
5 element names are associated with selective reference numerals;
6 inserting the fields into a drawing file;
7 revising at least one of the element names and reference numerals within the
8 element database and reference database respectfully, such that changes to the element
9 names in the element database and changes to the reference numerals in the reference
10 database change the fields inserted in the text file and the drawing file.
11 20. The method, as recited in claim 19, wherein the at least one of the element
12 names and reference numerals is revisable through one of a window, pull down menu,
13 and toolbar accessible within a program by which the text file is created.

1 21. A method in a computer system for identifying errors in a document having
2 element names and associated reference numerals, the method comprising:

- 3 a) identifying a reference numeral within a text document;
- 4 b) providing for selection of an element name associated with the reference
5 numeral form the text document;
- 6 c) storing the element name and the associated reference numeral in an
7 element name and reference numeral database, such that the reference numeral
8 and element name are associated;
- 9 d) identifying subsequent occurrences of the reference numeral, wherein the
10 subsequent occurrence of the reference numeral and the associated element name
11 are compared with the element name and reference numeral database;
- 12 e) indicating the presence of an inconsistency between the reference numeral
13 and element name in the database and the subsequent occurrence of the reference
14 numeral and the element names in the text document; and
- 15 f) repeating steps a) through e) for other reference numerals and element
16 names until an determined number of reference numerals are identified.

17 22. The system, as recited in claim 21, further comprising a means for selecting
18 an element name to associate with an identified reference numeral.